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Quantities of Food for Serving School Lunches



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BUREAU OF HUMAN NUTRITION AND HOME ECONOMICS
AGRICULTURAL RESEARCH ADMINISTRATION
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QUANTITIES OF FOOD FOR SERVING SCHOOL LUNCHES

The quantities of food to buy for one hundred as given in this pamphlet will serve as a guide for planning and buying school lunch food supplies. Quantities for serving larger or smaller groups may be calculated from figures shown for one hundred. For most foods, estimates have been based on portion sizes usually served in school meals, although in some cases larger portions have also been included.

Sizes of servings and quantities of food to purchase are given in terms of approximate weights and measures. For most foods, it is impossible to give the exact quantities to yield a given number of portions of stated size. As a rule, yields are influenced by methods used in preparation and serving. Meats, for example, shrink less when cooked at low than at high temperatures. If a high cooking temperature is used, more meat will be needed to provide a given number of servings of a certain weight. With a fruit or vegetable, the weight of a measured unit may vary because of differences in size of the product, tightness of pack, and fullness of the container. The condition of the commodity also affects the weight as considerable shrinkage occurs with standing.

The amount of loss of a fruit or vegetable in the preliminary preparation usually varies with the individual worker. To illustrate, in paring potatoes one person may cut away more of the vegetable than another who removes only thin parings. More potatoes would be needed by the first worker to yield the same number of servings.

Preparing more food than is needed often results in waste. Handling, storing, and reworking left-overs require extra work and may cause loss of food values. Overbuying also may result in deterioration of food, particularly perishables. Shrinkage and loss of food values occur when fresh vegetables and fruits are held under ordinary storage conditions for any length of time.

Table 1 gives the quantities in the most commonly used market unit. The information in table 2 may be used when calculating quantities in terms of other units. The table gives the weight of large units such as gallons, bushels, crates, boxes, and barrels.

The material has been assembled from various sources. The references used are listed on page 18.

Table 1.-Size of servings, quantities of food to purchase, general information

Food	Approximate size of serving	Approximate quantity to purchase for 100	General information $\frac{1}{2}$
MILK, MILK PRODUCTS			
Milk			
Fluid.....	1 cup ($\frac{1}{2}$ pint).....	25 quarts ($6\frac{1}{4}$ gallons)	1 quart = 2.15 pounds 1 gallon = 8.6 pounds
Dry, nonfat.....	$\frac{1}{4}$ cup added to 1 cup water $\frac{2}{3}$	$6\frac{1}{4}$ pounds	1 pound = 4 cups
Dry, whole.....	$\frac{1}{2}$ cup added to 1 cup water $\frac{2}{3}$	7 pounds	1 pound = $3\frac{1}{2}$ cups
Evaporated.....	$\frac{1}{2}$ cup added to $\frac{1}{2}$ cup water	29 cans ($14\frac{1}{2}$ -ounce can)	$14\frac{1}{2}$ -ounce can = 1- $\frac{2}{3}$ cups 1 pound = 2.2 pounds whole milk
Cream			
Light (20 percent)...	2 tablespoons.....	3 quarts	1 quart = 4 cups
Heavy (40 percent)...	$1\frac{1}{4}$ tablespoons whipped.....	2 pints	1 pint = 2 cups
Ice Cream			
Brick.....	$\frac{1}{8}$ quart.....	$12\frac{1}{2}$ quarts	1 quart cuts 6 to 8 slices
Bulk.....	$\frac{1}{3}$ cup (No. 12 disher)....	9 quarts ($2\frac{1}{4}$ gallons)	1 quart = 1- $\frac{1}{8}$ pounds 1 gallon = $4\frac{1}{2}$ pounds 1 gallon from 12 to 15 pounds whole milk
Cheese			
American.....	2 ounces ($3\frac{1}{4} \times 3\frac{1}{2} \times \frac{3}{4}$ inches)..	$12\frac{1}{2}$ pounds	1 pound = 1 quart grated 1 pound from 10 pounds whole milk
Cottage.....	$\frac{1}{3}$ cup (No. 12 disher)....	16- $\frac{2}{3}$ pounds	1 pound = 2 to $2\frac{1}{4}$ cups
FATS, OILS			
Table fat.....	2 teaspoons.....	$2\frac{1}{4}$ pounds	1 pound = 2 cups 1 pound butter from 21 pounds whole milk
Salad dressing			
Mayonnaise or cooked	1 tablespoon.....	$1\frac{1}{2}$ quarts	1 gallon = 8 pounds
French.....	1- $\frac{1}{3}$ tablespoons.....	2 quarts	1 gallon = 8 pounds
EGGS			
Fresh.....	1 egg.....	8- $\frac{1}{3}$ dozen	1 pound = 3 to 10 eggs, fresh; 4 cups, dried
Dry, whole.....	2 tablespoons added to $2\frac{1}{2}$ tablespoons water (equal to 1 fresh egg).....	3 pounds	1 case (30 dozen) = 45 pounds 1 case = 37.5 pounds frozen or liquid 1 case = 10.7 pounds dried 1 cup = 4 to 5 whole, 7 to 9 whites, or 12 to 14 yolks, fresh

MEAT, POULTRY, FISH

Beef

Corned (boneless)...	2 ounces..... 3 ounces.....	25 pounds 34 pounds	Average size cut, 15 to 18 pounds
Dried.....	1½ ounces.....	8 pounds	
Ground.....	2 ounces cooked..... 3 ounces cooked.....	24 pounds 35 pounds	
Roast, chuck (boneless)	2½ ounces cooked..... 3 ounces cooked.....	25 pounds 32 pounds	Average roast, 16 pounds
Roast, rib.....	2½ ounces cooked..... 3 ounces cooked.....	44 pounds 50 pounds	Average cut, first to fifth rib, 22 pounds
Roast, rump.....	2½ ounces cooked..... 3 ounces cooked.....	38 pounds 46 pounds	Average rump, 22 to 24 pounds
Steak, round.....	3 ounces cooked..... 4 ounces cooked.....	26 pounds 36 pounds	Average top of round, 22 to 24 pounds
Soup bone.....	1 cup stock.....	34 pounds	
Stew meat (boneless)	2½ ounces cooked.....	20 pounds	Average chuck, 20 to 25 pounds
Lamb			
Chops, loin or rib..	1 chop.....	100 chops	1 pound = 4 chops
Roast, leg (bone in)	2 ounces cooked..... 3 ounces cooked.....	32 pounds 46 pounds	Average leg roast, 6 pounds
Roast, shoulder..... (bone in)	2 ounces cooked..... 3 ounces cooked.....	22 pounds 32 pounds	Average shoulder, 5 pounds
Stew meat (boneless)	2½ ounces cooked.....	25 pounds	

1/ Symbol (=) in some cases indicates approximate equivalents only.

2/ BHN:HE recommendation, based on acceptability tests.

Table 1.-Size of servings, quantities of food to purchase, general information--Continued

Food	Approximate size of serving	Approximate quantity to purchase for 100	General information <u>1/</u>
<u>MEAT, POULTRY, FISH--Contd.</u>			
<u>Pork</u>			
Bacon.....	2 slices.....	10 pounds	1 pound = 20 slices
Ham, fresh (bone in)	2½ ounces cooked..... 3 ounces cooked.....	38 pounds 46 pounds	Average ham, 10 to 12 pounds
smoked (bone in)	2 ounces cooked..... 3 ounces cooked.....	37 pounds 55 pounds	Average ham, 10 to 12 pounds
Chops, loin.....	1 chop.....	100 chops	1 pound = 3 chops
Sausage, bulk.....	2 ounces cooked (4 oz. raw)	25 pounds	1 pound = 16 links
links.....	2 links (2 ounces raw).....	12½ pounds	
Shoulder, fresh.....	2 ounces cooked..... 3 ounces cooked.....	28 pounds 42 pounds	Average shoulder, 8 pounds
smoked.....	2 ounces cooked..... 3 ounces cooked.....	28 pounds 48 pounds	
Spareribs.....	5 ounces cooked.....	34 pounds	
<u>Veal</u>			
Chops, loin.....	1 chop.....	100 chops	1 pound = 4 chops
Cutlets, round.....	2½ ounces cooked..... 4 ounces cooked.....	24 pounds 37 pounds	Average leg roast, 18 to 20 pounds
Roast, leg (bone in)	2 ounces cooked..... 4 ounces cooked.....	25 pounds 50 pounds	
Stew meat (boneless)	2½ ounces cooked.....	25 pounds	Average shoulder, 12 pounds

Variety meats				
Heart.....	2 ounces cooked.....	13 pounds	Weight per heart: beef, $\frac{1}{2}$ pound; veal, $\frac{1}{2}$ pound; pork, $\frac{1}{2}$ pound	
	4 ounces cooked.....	25 pounds		
Kidney.....	2 ounces cooked.....	13 pounds	Weight per kidney: beef, 1 pound; veal, $\frac{3}{4}$ pound; pork, $\frac{1}{4}$ pound	
	4 ounces cooked.....	25 pounds		
Liver.....	2 ounces cooked.....	13 pounds	Weight per liver: beef, 10 pounds; veal, $2\frac{1}{2}$ pounds; pork, 3 pounds	
	4 ounces cooked.....	25 pounds		
Tongue.....	2 ounces cooked.....	13 pounds	Weight per tongue: beef $3\text{-}\frac{3}{4}$ pounds; veal, $1\frac{1}{2}$ pounds; pork, $3\frac{1}{4}$ pound	
	4 ounces cooked.....	25 pounds		
Lunch meat, bologna.	2 ounces.....	13 pounds		
Frankfurters.....	2 ounces (1 frankfurter)...	$12\frac{1}{2}$ pounds	1 pound = 8 frankfurters	
	4 ounces (2 frankfurters)...	25 pounds		
Chicken $\frac{3}{4}$				
Broiler.....	$\frac{1}{4}$ to $\frac{1}{2}$ bird.....	25 to 50 birds	Average bird, 1 to $2\frac{1}{2}$ pounds	
Fryer.....	$\frac{1}{4}$ bird.....	25 birds	Average bird, $2\frac{1}{2}$ to $3\frac{1}{2}$ pounds	
Roaster.....	2 to 3 ounces cooked meat (boned).....	70 to 100 pounds, dressed	Average bird, over $3\frac{1}{2}$ pounds (5 to 9 months old)	
	2 ounces cooked meat (boned)	35 to 50 pounds, dressed	Average bird, $3\frac{1}{2}$ to 6 pounds	
Hen.....	4 ounces cooked meat (boned)	70 to 100 pounds, dressed		
	2 ounces cooked meat (boned)	40 to 50 pounds, dressed	Average bird, 6 to 9 pounds	
Capon.....	4 ounces cooked meat (boned)	80 to 100 pounds, dressed		
	2 ounces cooked meat (boned)	40 to 50 pounds, dressed	Average bird, 12 to 16 pounds	
Turkey.....	4 ounces cooked meat (boned)	80 to 100 pounds, dressed		

-5-

$\frac{3}{4}$ Dressed weight: only feathers removed. Approximately 90 percent of live weight.

Drawn weight: feathers, head, feet, and entrails removed. Is 60 to 70 percent of live weight or 70 to 80 percent of dressed weight. Edible cooked meat is 30 to 40 percent of live weight.

Table 1.-Size of servings, quantities of food to purchase, general information--Continued

Food	Approximate size of serving	Approximate quantity to purchase for 100	General information $\frac{1}{1}$
Fish			
Fresh.....	3 ounces cooked.....	30 to 50 pounds	1 No. 1 tall can = 1 pound or 2 cups including liquid
Canned.....	2 ounces.....	14 No. 1 cans	1 pound = 1 quart
Oysters.....	4 to 6 small oysters.....	7 quarts	1 quart = 60 to 100 small or 40 to 45 large oysters
DRY BEANS, PEAS, NUTS,			
PEANUTS			
Beans, navy.....	$\frac{1}{2}$ cup cooked.....	10 pounds dry	1 pound = $2\frac{1}{3}$ cups dry; yields 4 to 6 cups cooked
Peas.....	$\frac{1}{2}$ cup cooked.....	10 pounds dry	1 pound = $2\frac{1}{4}$ cups dry; yields $5\frac{1}{2}$ cups cooked
Nuts			
Almonds, hard shell.	1 tablespoon meats.....	6 pounds	1 pound hard shell yields 1 cup meats
soft shell.	1 tablespoon meats.....	3 pounds	1 pound soft shell yields 2 cups meats
Pecans, hard shell..	1 tablespoon meats.....	6 pounds	1 pound almond meats = 3 to $3\frac{1}{2}$ cups
paper shell.	1 tablespoon meats.....	3 pounds	1 pound hard shell yields 1 cup meats
Walnuts, English....	1 tablespoon meats.....	5 pounds	1 pound paper shell yields 2 cups meats
			1 pound pecan meats = $3\frac{1}{2}$ to $4\frac{1}{2}$ cups
			1 pound English yields 1-2/3 cups meats
Black.....	1 tablespoon meats.....	9 pounds	1 pound English meats = 4 to $4\frac{1}{2}$ cups
Peanuts, roasted.....	1 tablespoon shelled.....	$2\frac{1}{2}$ pounds	1 pound black yields 2/3 cup meats
Peanut butter.....	4 tablespoons.....	14 pounds	1 pound black meats = 4 cups
			1 pound yields $2\frac{1}{2}$ cups shelled
			1 pound = 1-3/4 cups

FRUITS

Fresh

Apples.....	1 medium raw..... 1/2 cup cooked.....	3/4 pounds 3/4 pounds	1 pound = 3 to 4 medium; yields 3 cups diced
Apricots.....	2 whole.....	20 pounds	1 pound = 10 whole
Avocados.....	1/4 avocado.....	25 pounds	1 pound = 1 medium
Bananas.....	1 medium or 1/2 cup sliced...	3/4 pounds	1 pound = 3 to 4 medium; yields 2 to 2 1/2 cups sliced
Berries.....	1/2 cup.....	16 quarts	2/4 or 3/2 quart boxes per crate 1 quart strawberries yields 3 cups hulled
Cantaloup.....	1/4 melon.....	25 pounds	1 pound = 1 medium
Cherries.....	1/4 cup pitted.....	1/4 quarts unpitted	1 quart = 2 pounds unpitted; yields 2 cups pitted
Cranberries.....	1/4 cup sauce.....	8 pounds	1 pound = 1 quart raw; yields 3 to 3 1/2 cups sauce or 2-3/4 cups jelly
Grapefruit.....	1/2 whole..... 1/2 cup sections.....	50 medium 30 medium	1 pound = 1 large 1 medium yields 10 to 12 sections or 1-3/4 cups broken sections
Grapes, Tokay.....	1/2 cup seeded.....	10 pounds	36 to 46 large; 5/4 to 6/4 medium; 70 to 126 small per crate
Lemons.....	1/2 lemon for 1 glass lemonade	12 1/2 pounds or 4 dozen	1 pound = 2-3/4 cups seeded 1 pound = 4 medium 10 medium yield 1 pint juice
Oranges.....	1 medium..... 1/2 cup juice..... 1/2 cup sections.....	50 pounds or 8-1/3 dozen 50 pounds or 8-1/3 dozen 50 pounds or 8-1/3 dozen	180 to 300 large, 360 to 420 medium, 442 to 540 small per crate 1 pound = 2 medium 80 to 126 large, 150 to 216 medium, 250 to 392 small per crate
Peaches.....	1 medium or 1/2 cup sliced...	25 pounds	1 pound = 4 medium; yields 2 cups sliced
Pears.....	1 medium or 1/2 cup diced....	25 pounds	1 pound = 3 to 4 medium; yields 2 cups diced

Table 1.--Size of servings, quantities of food to purchase, general information--Continued

Food	Approximate size of serving	Approximate quantity to purchase for 100	General information 1/
FRUITS--Contd.			
Fresh--Contd.			
Pineapple.....	$\frac{1}{2}$ cup cubed.....	14 medium	1 whole = 2 pounds; yields 3 to $3\frac{1}{2}$ cups cubed
Plums.....	$\frac{3}{4}$ medium.....	25 pounds	1 pound = 12 medium
Rhubarb.....	$\frac{1}{2}$ cup sauce.....	20 pounds	1 pound = $2\frac{1}{2}$ cups cooked
Watermelon.....	$1\frac{1}{2}$ -to 2-pound slice.....	150 to 200 pounds	
Canned $\frac{1}{4}$			
Apricots.....	2 whole + 3 tablespoons juice	$5\frac{1}{2}$ to 6 No. 10 cans	1 No. 10 can = $3\frac{1}{4}$ to $3\frac{1}{2}$ whole apricots + $1\frac{1}{2}$ quarts juice
Peaches.....	2 halves + 3 tablespoons juice	5 to 6 No. 10 cans	1 No. 10 can = 35 to 40 halves + $1\frac{1}{4}$ quarts juice
Pears.....	2 halves + 3 tablespoons juice	6 No. 10 cans	1 No. 10 can = 32 to 36 halves + $1\frac{1}{2}$ quarts juice
Pineapple.....	1 slice + 3 tablespoons juice	2 No. 10 cans	1 No. 10 can = 50 medium slices + $1\frac{1}{2}$ quarts juice; 3 slices diced = 1 cup
			1 No. 10 can broken slices = $2\frac{1}{2}$ quarts fruit diced + $1\frac{1}{2}$ quarts juice
Prunes (plums).....	3 whole + 3 tablespoons juice	7 No. 10 cans	1 No. 10 can = 46 whole + $1\frac{1}{2}$ quarts juice
Other fruits, sieved or cut	$\frac{1}{2}$ cup.....	4 No. 10 cans	1 No. 10 can = $3\frac{1}{4}$ quarts
Fruit juice.....	$\frac{1}{2}$ cup.....	4 No. 10 cans or 9 46 ounce cans	46 ounce can = $1\frac{1}{2}$ quarts
Dried			
Apples.....	$\frac{1}{2}$ cup cooked.....	10 pounds	1 pound = 3 cups; yields 5 to 6 cups cooked
Apricots.....	$\frac{1}{2}$ cup cooked.....	$12\frac{1}{2}$ pounds	1 pound dried = 8 pounds fresh 1 pound = 3 cups; yields 4 cups cooked
Dates.....	3 medium.....	6 pounds	1 pound dried = $5\frac{1}{2}$ pounds fresh 1 pound = 50 to 60 medium; yields 2 to $2\frac{1}{2}$ cups cut fine 1 pound dried = 1-1 $\frac{1}{3}$ pounds fresh

Figs.....	2 figs.....	4½ pounds	1 pound = 44 figs; yields 3 cups cut fine
Peaches.....	½ cup cooked.....	12½ pounds	1 pound dried = 3 pounds fresh in California, 4 pounds fresh elsewhere
Pears.....	2 pear halves.....	8 pounds	1 pound dried freestone = 6½ pounds fresh
Prunes.....	½ cup cooked.....	12½ pounds	1 pound dried cling = 7½ pounds fresh 1 pound = 27 pear halves 1 pound dried = 3 pounds fresh 1 pound = 2½ cups; yields 3 cups cooked, without juice 1 pound = 20 to 30 large, 30 to 40 medium, 40 to 50 small prunes 1 pound dried = 2½ pounds fresh in California, 3 to 4 pounds fresh elsewhere
Raisins.....	½ cup cooked.....	12½ pounds	1 pound seedless = 3 cups; yields 4 cups cooked 1 pound seeded = 2½ cups 1 pound = 4 pounds fresh grapes
VEGETABLES			
Fresh			
Asparagus.....	½ cup cooked.....	30 pounds	1 pound = 16 to 20 stalks
Beans, lima.....	1/3 cup cooked.....	50 pounds	1 pound = 1½ quarts; yields 2/3 cup shelled or 1/3 pound
Beans, snap.....	½ cup cooked.....	24 pounds	1 pound = 1 quart; yields 3 cups cut
Beets.....	½ cup cooked.....	28 pounds	1 pound = 4 medium; yields 2 cups cooked and diced
Broccoli.....	½ cup (2 to 3 ounces) cooked.....	36 pounds	
Brussels sprouts....	3 ounces cooked.....	24 pounds	1 pound = 1 quart

4/ Canned foods for school lunches are usually purchased in No. 10 cans.
 No. 1 = 2 cups; No. 2 = 2½ cups; No. 2½ = 3½ cups; No. 3 = 4 cups
 Sizes of smaller cans are;

Table 1.--Size of servings, quantities of food to purchase, general information--Continued

Food	Approximate size of serving	Approximate quantity to purchase for 100	General information <u>1/</u>
VEGETABLES--Contd.			
Fresh--Contd.			
Cabbage.....	$\frac{1}{2}$ cup (1 ounce) shredded, raw	16 pounds	1 pound shredded, raw = 2 quarts
	$\frac{1}{2}$ cup cooked.....	24 pounds	1 pound shredded, raw yields 2 cups cooked
Carrots.....	2 strips, raw.....	8 pounds	1 pound = 4 to 5 medium; yields $2\frac{1}{2}$ cups cooked and diced or 1 quart shredded, raw
	$\frac{1}{2}$ cup cooked.....	30 pounds	
Cauliflower.....	$\frac{1}{2}$ cup (3 ounces) cooked.....	56 pounds	1 pound = 1 medium head
Celery.....	1 stalk, raw.....	12 pounds	1 pound = 1 medium bunch; yields
	$\frac{1}{2}$ cup cooked.....	30 pounds	2 cups raw diced or $1\frac{1}{2}$ cups cooked diced
Collards.....	$\frac{1}{2}$ cup cooked.....	30 pounds	1 quart raw diced = 1 pound
Corn on cob.....	1 ear.....	100 ears	36 ears per bushel
Cucumbers.....	4 slices.....	10 cucumbers	8 inch cucumber = $\frac{3}{4}$ pound; yields 40 slices
Eggplant.....	2 slices.....	28 pounds	1 pound = 1 small; yields 8 slices
Lettuce, salad.....	$1/6$ medium head.....	16 pounds	1 pound = 1 medium head before trimming; yields $1\frac{1}{2}$ quarts shredded
Okra.....	1 leaf.....	10 pounds	10 to 12 salad leaves per head
Onions.....	$\frac{1}{2}$ cup cooked.....	30 pounds	
	$\frac{1}{2}$ cup cooked.....	30 pounds	1 pound = 5 medium; yields 2 cups cooked
Parsnips.....	$\frac{1}{2}$ cup cooked.....	30 pounds	1 pound = 4 medium
Peas.....	$\frac{1}{2}$ cup cooked.....	50 pounds	1 pound yields 1 cup shelled
Peppers, green.....	1 pepper.....	100 peppers	1 bushel yields 7 to $8\frac{1}{2}$ quarts shelled
	$\frac{1}{2}$ cup cooked.....	30 pounds	1 pound = 5 to 7 medium
Potatoes.....	cup cooked (sieved).....	50 pounds	125 peppers per bushel
Pumpkin.....	cup cooked.....	40 pounds	1 pound = 3 medium
Rutabagas.....	cup cooked.....		

Spinach.....	$\frac{1}{2}$ cup cooked.....	34 pounds	1 pound = 3 medium
Squash, summer.....	$\frac{1}{2}$ cup cooked.....	30 pounds	
winter.....	$\frac{1}{2}$ cup cooked.....	50 pounds	
Sweetpotatoes.....	1 medium.....	34 pounds	
Swiss chard.....	$\frac{1}{2}$ cup cooked.....	30 pounds	1 pound = 4 medium; yields 2 cups diced
Tomatoes.....	1 medium.....	25 pounds	1 pound = 3 medium
Turnips.....	$\frac{1}{2}$ cup cooked.....	30 pounds	
Canned $\frac{1}{4}$ Vegetables.....	$\frac{1}{2}$ cup.....	4 to 6 No. 10 cans	1 No. 10 can = 13 cups
Tomato juice.....	$\frac{1}{2}$ cup.....	4 No. 10 cans or 9 46 ounce cans	1 No. 10 can = 12 cups; 46 ounce can = 5- $\frac{3}{4}$ cups
Soups, concentrated..	$\frac{1}{2}$ cup + $\frac{1}{2}$ cup liquid.....	4 No. 10 cans	1 No. 10 can = 12 cups
CEREALS, CEREAL PRODUCTS			
Flakes (all kinds)...	1 cup (1 ounce).....	6 $\frac{1}{4}$ pounds	1 pound cornflakes = 4 quarts
Puffed cereals.....	1 cup ($\frac{1}{2}$ ounce).....	3 pounds	
Shredded wheat.....	1 biscuit (1 ounce).....	6 $\frac{1}{4}$ pounds	
Hominy, grits.....	$\frac{1}{2}$ cup cooked.....	4 pounds	1 pound grits = 3 cups; yields 3 $\frac{1}{4}$ quarts cooked
canned.....	$\frac{1}{3}$ cup.....	11 No. 2 $\frac{1}{2}$ cans	
Corn meal, coarse.....	$\frac{1}{2}$ cup cooked (mush).....	4 pounds	1 pound coarse = 3 cups; yields 3 quarts cooked
fine.....	$\frac{1}{2}$ cup cooked (mush).....	3 pounds	1 pound fine = 3 $\frac{1}{4}$ cups; yields 4 quarts cooked
coarse or fine..	2 $\frac{1}{2}$ x3-inch piece cornbread..	4 to 8 pounds	1 pound = 2-1/8 cups; yields 1-3/4 quarts cooked
Rice.....	$\frac{1}{2}$ cup cooked.....	7 pounds	1 pound = 5-1/3 cups; yields 3 quarts cooked
Rolled oats.....	$\frac{1}{2}$ cup cooked (1 ounce raw)..	4 pounds	1 pound = 1 quart; yields 2 $\frac{1}{2}$ quarts cooked
Macaroni.....	$\frac{1}{2}$ cup cooked.....	5 pounds	1 pound = 1 quart; yields 2 $\frac{1}{4}$ quarts cooked
Spaghetti.....	$\frac{1}{2}$ cup cooked.....	5 $\frac{1}{2}$ pounds	1 pound = 3 quarts; yields 2-3/4 quarts cooked
Noodles.....	$\frac{1}{2}$ cup cooked.....	4 $\frac{1}{2}$ pounds	

Table 1.-Size of servings, quantities of food to purchase, general information--Continued

Food	Approximate size of serving	Approximate quantity to purchase for 100	General information 1/
CEREALS, CEREAL PRODUCTS--			
Contd.			
Tapioca, pearl.....	$\frac{1}{2}$ cup cooked.....	6 $\frac{1}{2}$ pounds	1 pound = 3 cups; yields 2 quarts cooked
granulated....	$\frac{1}{2}$ cup cooked.....	2 pounds	1 pound = 2 $\frac{1}{2}$ cups; yields 6 quarts cooked
BAKED PRODUCTS			
Bread.....	2 slices.....	11 pound loaves or 6 sandwich loaves	Pound loaf yields 18 to 20 slices, without ends Sandwich loaf = 2 pounds; yields 33 to 36 slices, without ends
Rolls.....	2 rolls.....	16-2/3 dozen	
Crackers, soda.....	2 crackers.....	3 pounds	1 pound = 70 crackers
graham.....	2 crackers.....	3 $\frac{1}{2}$ pounds	1 pound = 60 crackers
Cake.....	2 $\frac{1}{2}$ x3-inch piece.....	4 cakes (18x12 inches)	
Cookies.....	2 cookies.....	16-2/3 dozen	
Pie.....	1/6 pie.....	17 pies	8-inch pie cuts 6 pieces
	1/8 pie.....	13 pies	9-inch pie cuts 8 pieces
SUGARS, SWEETS			
Candy			
Chocolate drops.....	3 chocolates.....	2 $\frac{1}{2}$ pounds	
Small candies.....	Several pieces.....	2 pounds	
Honey, strained.....	2 tablespoons.....	10 pounds	1 pound = 1-1/3 cups
Jams, jellies, preserves.....	1 tablespoon.....	$\frac{1}{2}$ No. 10 can	
Marshmallows.....	2 marshmallows.....	3-1/3 pounds	1 pound = 60 marshmallows
Molasses.....	2 tablespoons.....	10 pounds	1 pound = 1-1/3 cups
Syrup, cane.....	2 tablespoons.....	3 quarts	1 gallon = 5 pounds sugar
maple.....	2 tablespoons.....	3 quarts	1 gallon = 8 pounds maple sugar

BEVERAGES			
Cocoa.....	1 cup.....	1½ pounds	1 pound = 1 quart; 1 tablespoon makes 1 cup beverage
Chocolate.....	1 cup.....	1½ pounds	1 pound = 16 squares; ¼ square makes 1 cup beverage
Coffee 5/.....	1 cup.....	2½ pounds	1 pound = 5 cups
			2 tablespoons makes one cup beverage
Tea 5/.....	1 cup.....	1/3 pound	1 pound = 6 cups
			1 teaspoon makes one cup beverage
MISCELLANEOUS			
Coconut.....	1½ tablespoons.....	1 pound	1 pound = 2 quarts
			1 cup = 2 ounces
Gelatin, dry, plain....	½ cup dessert.....	12½ ounces	1 pound = 3 cups
			2 to 3 tablespoons thickens
			1 quart liquid
dry, flavored ½	½ cup dessert.....	4 pounds	1 pound = 3½ cups dry
			1 to 1¼ cups thickens 1 quart liquid
Pickle relish.....	1 tablespoon.....	½ No. 10 can	

5/ For teachers' lunches, banquets, and other special occasions.

Table 2.—Measures and weights of various foods ^{1/}

Commodity	Unit ^{2/}	Approximate net weight (Pounds)
Apples.....	Bushel.....	48
	Barrel.....	140
	Box (10 $\frac{1}{2}$ x11 $\frac{1}{2}$ x18 in.).....	44
Apricots.....	Bushel.....	48
Western.....	Crate (4 $\frac{1}{2}$ x16x16-1/8 in.).....	22
Artichokes, globe.....	Box (9-3/4x11x20-5/8 in.).....	40
Jerusalem.....	Bushel.....	50
Asparagus.....	Crate, 1 dozen 2-pound bunches.....	24
Avocados, California.....	Box (3-3/4x13 $\frac{1}{2}$ x16-1/8 in.).....	13
Florida.....	Box (4-3/16x13 $\frac{1}{2}$ x16-1/8 in.).....	12 to 15
Bananas.....	Bunch, 8 to 9 hands.....	45 to 65
Beans, Lima (dry).....	Bushel.....	56
Other (dry).....	Bushel.....	60
	Sack.....	100
Lima (unshelled).....	Bushel.....	32
Snap.....	Bushel.....	30
Beets, without tops.....	Bushel.....	52
Bunched.....	Western crate (13x18x21-5/8 in.)...	70
Berries, frozen pack		
Without sugar.....	50-gallon barrel.....	380
3+1 pack.....	50-gallon barrel.....	425
2+1 pack.....	50-gallon barrel.....	450
Blackberries.....	24-quart crate.....	36
Butter.....	Tub.....	63
Cabbage.....	1 $\frac{1}{2}$ -bushel hamper.....	45 to 50
	Western crate (13x18x21-5/8 in.)...	80
Cantaloups.....	Standard 45 crate (12x12x22-1/8 in.)	60
Carrots, without tops.....	Bushel.....	50
Bunched.....	Western crate (13x18x21-5/8 in.)...	75
Cauliflower.....	1 $\frac{1}{2}$ -bushel crate.....	37
Celery.....	2/3 crate (22x16x20-3/4 in.).....	90
	$\frac{1}{2}$ crate.....	65
Cherries, with stems.....	Bushel.....	56
without stems.....	Bushel.....	64
	Flat box (3-3/4x11 $\frac{1}{2}$ x14-1/8 in.)....	15

^{1/} From U. S. Department of Agriculture Agricultural Statistics, 1945, pp. 5-8. (Reprinted as Separate 94.) The weights as shown were prepared for use of workers in the Department of Agriculture and are not necessarily legal weights.

^{2/} Standard bushel used in the United States contains 2,150.42 cubic inches; the gallon, 231 cubic inches, and the standard fruit and vegetable barrel, 7,056 cubic inches. Such large-sized products as apples and potatoes sometimes are sold on the basis of a heaped bushel. All box and crate sizes shown are approximate inside dimensions.

Table 2.—Measures and weights of various foods 1/—Contd.

Commodity	Unit 2/	Approximate net weight (Pounds)
Corn, ear husked.....	Bushel.....	<u>3/</u> 70
Shelled.....	Bushel.....	56
Green, sweet.....	Bushel.....	35
Meal.....	Bushel.....	50
	Barrel.....	196
Oil.....	Gallon.....	4/7.7
Sirup.....	Gallon.....	<u>11.</u> 75
Cowpeas.....	Bushel.....	60
Cranberries.....	Barrel.....	100
	1/4-barrel box (9 $\frac{1}{4}$ x10 $\frac{1}{2}$ x15 in.).....	25
Cream, 40 percent butterfat..	Gallon.....	8.39
Cucumbers.....	Bushel.....	48
Dewberries.....	24-quart crate.....	36
Eggplant.....	Bushel.....	33
Eggs, average size.....	Case, 30 dozens.....	45
Escarole.....	1-1/2-bushel hamper.....	37
Figs, fresh.....	Box, single layer (1-3/4x11x16-1/8 in.)	6
Flour, various.....	Barrel.....	196
Grapefruit, Florida and Texas	Box (12x12x24 in.).....	80
California.....	Box (11 $\frac{1}{2}$ x11 $\frac{1}{2}$ x24 in.).....	<u>5/</u> 68
Grapes.....	Bushel.....	48
Eastern.....	12-quart basket.....	18
	Lug box (5-3/4x13-1/2x16-1/8 in.)...	28
	4-basket crate (4-3/4x16x16-1/8 in.)	20
Western.....	Keg (2,642 cubic inches).....	<u>6/</u> 32
	Box, sawdust pack (7-3/4x15x18-3/4 in.)	34
Hickory nuts.....	Bushel.....	50
Honey.....	Gallon.....	12
Kale.....	Bushel.....	18
Lard.....	Tierce.....	375
Lemons, California.....	Box (9-7/8x13x25 in.).....	79
Lentils.....	Bushel.....	60
Lettuce.....	Western crate (13x18x21-5/8 in.)...	70
Limes.....	Box (12x12x24 in.).....	80

3/ The standard weight of 70 pounds is usually recognized as being about 2 measured bushels of corn, husked, on the ear. Seventy pounds yield 1 bushel, or 56 pounds of shelled corn. Six bushels of corn yield 1 barrel degermed corn meal; 4 bushels yield 1 barrel nondegermed.

4/ This is the weight commonly used in trade practice, the actual weight varying according to temperature conditions.

5/ Grapefruit in the Desert Valley of California and in Arizona probably weighs slightly less than that in other parts of California, or about 65 pounds per box, compared with 68 pounds in other California.

6/ About 13 pounds of sawdust are required to pack 32 pounds of grapes in a keg, thus making the total weight about 45 pounds.

Table 2.--Measures and weights of various foods 1/—Contd.

Commodity	Unit ^{2/}	Approximate net weight (Pounds)
Maple Sirup.....	Gallon.....	11
Milk.....	Gallon.....	8.6
Molasses.....	Gallon.....	12
Olives.....	Lug box (5-3/4x13 1/2x16-1/8 in.).....	25 to 30
Olive oil.....	Gallon.....	4/7.6
Onions, dry.....	Sack.....	100
	Sack.....	50
	Bushel (late).....	57
	Bushel (early).....	50
green, bunched.....	Crate (13x18x21-5/8 in.).....	50 to 55
Oranges, Florida and Texas...	Box (12x12x24 in.).....	90
California.....	Box (11 1/2x11 1/2x24 in.).....	77
Parsnips.....	Bushel.....	50
Peaches.....	Bushel.....	48
	Lug box (5-3/4x13 1/2x16-1/8 in.).....	20
Peanut oil.....	Gallon.....	4/7.7
Peanuts, unshelled		
Virginia type.....	Bushel.....	22
Runners, southeastern.....	Bushel.....	28
Spanish.....	Bushel.....	30
Pears, California.....	Bushel.....	48
Other.....	Bushel.....	50
Western.....	Box (8 1/2x11 1/2x18 in.).....	46
Peas, green, unshelled.....	Bushel.....	30
Dry.....	Bushel.....	60
Peppers.....	Bushel.....	25
Pineapples.....	Crate (12x10 1/2x33 in.).....	70
Plums and prunes.....	Bushel.....	56
	Crate (4 1/2x16x16-1/8 in.).....	20
	Suitcase lug (3 1/4x11x18 in.).....	16
Popcorn, on ear.....	Bushel.....	3/70
Shelled.....	Bushel.....	56
Potatoes.....	Bushel.....	60
	Barrel.....	165
Quinces.....	Bushel.....	48
Raspberries.....	24-quart crate.....	36
Rice, rough.....	Bushel.....	45
	Bag.....	100
	Barrel.....	162
milled.....	Pocket or bag.....	100
Rutabagas.....	Bushel.....	56
Sorgo, sirup.....	Gallon.....	11.55
Soybeans.....	Bushel.....	60
Soybean oil.....	Gallon.....	4/7.7
Spinach.....	Bushel.....	18

Table 2.—Measures and weights of various foods 1/—Contd.

Commodity	Unit ^{2/}	Approximate net weight (Pounds)
Strawberries.....	24-quart crate.....	36
Sugar cane sirup.....	Gallon.....	11.35
Sweetpotatoes.....	Bushel.....	7/55
Tangerines, Florida.....	$\frac{1}{2}$ strap (6x12x24 in.).....	<u>8/40</u>
Tomatoes.....	Bushel.....	53
	Lug box (5-3/4x13 $\frac{1}{2}$ x16-1/8 in.).....	32
Turnips, without tops.....	Bushel.....	54
bunched.....	Crate (13x18x21-5/8 in.).....	60 to 80
Walnuts.....	Bushel.....	50
Water, 60° F.....	Gallon.....	8.33
Watermelons.....	Melon of average or medium size....	25
Wheat.....	Bushel.....	60
Wheat flour.....	Barrel.....	9/196
Various commodities.....	Short ton.....	2,000
	Long ton.....	2,240

^{7/}—This average of 55 pounds indicates the usual weight of sweetpotatoes when harvested. Much weight is lost in curing or drying, and the net weight when sold in terminal markets may be below 55 pounds.

^{8/}This is the box ordinarily used in market sales. Farm weight is about 90 pounds per whole box.

^{9/}It requires 4.7 bushels of wheat to yield 1 barrel of flour.

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